

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-9 (canceled).

Claim 10 (new): A boundary acoustic wave device using a Stoneley wave, comprising:

a piezoelectric substance;

a dielectric substance disposed on one surface of the piezoelectric substance;

and

electrodes provided at a boundary between the piezoelectric substance and the dielectric substance; wherein

thicknesses of the electrodes are such that the acoustic velocity of the Stoneley wave is less than that of a slow transverse wave propagating through the dielectric substance and that of a slow transverse wave propagating through the piezoelectric substance.

Claim 11 (new): The boundary acoustic wave device according to Claim 10, wherein the electrodes are each primarily composed of an electrode layer including at least one material selected from the group consisting of Ag, Au, Cu, Fe, Mo, Ni, Ta, W, Ti, and Pt.

Claim 12 (new): A boundary acoustic wave device using a Stoneley wave, comprising:

a piezoelectric substance;

a dielectric substance disposed on one surface of the piezoelectric substance;

and

electrodes provided at a boundary between the piezoelectric substance and the dielectric substance; wherein

a duty ratio of strips defining the electrodes is such that the acoustic velocity of the Stoneley wave is less than that of a slow transverse wave propagating through the dielectric substance and that of a slow transverse wave propagating through the piezoelectric substance.

Claim 13 (new): The boundary acoustic wave device according to Claim 12, wherein thicknesses of the electrodes are such that the acoustic velocity of the Stoneley wave is less than that of the slow transverse wave propagating through the dielectric substance and that of the slow transverse wave propagating through the piezoelectric substance.

Claim 14 (new): The boundary acoustic wave device according to Claim 12, wherein the electrodes are each primarily composed of an electrode layer including at least one material selected from the group consisting of Ag, Au, Cu, Fe, Mo, Ni, Ta, W, Ti, and Pt.

Claim 15 (new): A boundary acoustic wave device using a Stoneley wave, comprising:

a piezoelectric substance primarily composed of LiNbO_3 ;

a dielectric substance disposed on one surface of the piezoelectric substance;

and

electrodes provided at a boundary between the piezoelectric substance and the dielectric substance; wherein

Euler angles (ϕ , θ , ψ) of the piezoelectric substance primarily composed of LiNbO_3 are within ranges shown in the following table, and a Stoneley wave having an acoustic velocity of about 3,757 m/sec or less is used:

ϕ (°)	θ (°)	ψ (°)
30	90	225
30	270	135
30	270	315
90	90	135
90	90	315
90	270	45
90	270	225
150	90	45
150	90	225
150	270	135
150	270	315
210	90	135
210	90	315
210	270	45
210	270	225
270	90	45
270	90	225
270	270	135
270	270	315
330	90	135
330	90	315
330	270	45
330	270	225

Claim 16 (new): The boundary acoustic wave device according to Claim 15, wherein thicknesses of the electrodes are such that the acoustic velocity of the Stoneley wave is less than that of the slow transverse wave propagating through the dielectric

substance and that of the slow transverse wave propagating through the piezoelectric substance.

Claim 17 (new): The boundary acoustic wave device according to Claim 15, wherein a duty ratio of strips defining the electrodes is such that the acoustic velocity of the Stoneley wave is less than that of a slow transverse wave propagating through the dielectric substance and that of a slow transverse wave propagating through the piezoelectric substance.

Claim 18 (new): The boundary acoustic wave device according to Claim 15, wherein the electrodes are each primarily composed of an electrode layer including at least one material selected from the group consisting of Ag, Au, Cu, Fe, Mo, Ni, Ta, W, Ti, and Pt.

Claim 19 (new): A boundary acoustic wave device using a Stoneley wave, comprising:

a piezoelectric substance primarily composed of LiNbO_3 ;

a dielectric substance disposed on one surface of the piezoelectric substance;

and

electrodes provided at a boundary between the piezoelectric substance and the dielectric substance; wherein

when a density of the electrodes, a thickness of the electrodes, and a wavelength of the Stoneley wave are represented by ρ (kg/m^3), H (λ), and λ , respectively, a relationship $H > 1/[1/(3 \times 10^7 \times \rho^{-2.22} + 0.017) - 0.4]$ is satisfied.

Claim 20 (new): The boundary acoustic wave device according to Claim 19, wherein the density ρ of the electrodes is such that $\rho \geq 4,711 \text{ kg/m}^3$ is satisfied.

Claim 21 (new): The boundary acoustic wave device according to Claim 19, wherein the electrodes are each primarily composed of an electrode layer including at least one material selected from the group consisting of Ag, Au, Cu, Fe, Mo, Ni, Ta, W, Ti, and Pt.

Claim 22 (new): A boundary acoustic wave device using a Stoneley wave, comprising:

a piezoelectric substance primarily composed of LiNbO_3 ;
a dielectric substance disposed on one surface of the piezoelectric substance;
and
electrodes provided at a boundary between the piezoelectric substance and the dielectric substance; wherein
when a density of the electrodes, a thickness of the electrodes, and a wavelength of the Stoneley wave are represented by ρ (kg/m^3), H (λ), and λ , respectively, the relationships $H > 0.03 \lambda$ and $\rho > 2,699 \text{ kg/m}^3$ are satisfied.

Claim 23 (new): The boundary acoustic wave device according to Claim 22, wherein the electrodes are each primarily composed of an electrode layer including at least one material selected from the group consisting of Ag, Au, Cu, Fe, Mo, Ni, Ta, W, Ti, and Pt.